



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,455	09/15/2003	David Abu Ghazaleh	RSW920030055US1	2196

7590. 04/06/2007
Theodore Naccarella, Esquire
Synnestvedt & Lechner LLP
2600 Aramark Tower
1101 Market Street
Philadelphia, PA 19107-2950

EXAMINER

CHAUHAN, LOREN B

ART UNIT	PAPER NUMBER
----------	--------------

2109

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/663,455

Applicant(s)

GHAZALEH ET AL.

Examiner

Loren Chauhan

Art Unit

2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - In paragraph 0042, lines 7-8; "209" is not shown in fig. 2.
 - In paragraph 0051, line 10; "222" should be changed to -223-.
 - In paragraph 0052, line 7; "266" should be changed to -286-.
 - In paragraph 0059, line 2; "201a" should be changed to -206-.
 - In paragraph 0059, line 5; "500a" should be changed to -500-.
 - In paragraph 0063, line 14; "OED 300a" is missing in figure 5.
 - In paragraph 0067, line 16; "389" is missing in figure 3.
 - In paragraph 0069, line 7; "301" is missing in figure 6.
 - In paragraph 0073, line 2; "300b" is missing in figure 6.

Appropriate correction is required.

Claim Objections

2. Claims 4, 14 and 25 are objected to because of the following informalities:
 - For the recitation of claim 4, the first line "**claim 3 wherein step (6)**". Is it suppose to be "claim 3 wherein step (7)"?
 - For the recitation of claim 14, seventh line "**additional program elements include:**" Is it suppose to be " The method of claim 2"?

- For the recitation of claim 25, the first line “**claim 24 wherein the fourth**”.

Is it suppose to be “claim 24 wherein fifth”?

Appropriate correction is required.

The art rejections of these claims will be applied based on the examiner’s best understanding of the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8, 20-29 and 35 are rejected under 35 U.S.C. 102(b) based upon **Visio 2000 Standard Edition User Guide published in 1999 by Visio Corporation.**

5. **As per claim 1, Visio** teaches a method for graphically representing object oriented programming logic, the method comprising the steps of:

(1) Providing a plurality of different symbols (**Page # 13, part H in figure**) for use in a diagram of object oriented programming logic, each different symbol (**Page # 13, part H in fig. Also see the description**) representing a different type of object

(2) Selecting an object as a main object of the logic to be represented in the diagram (**Page # 24, "Modify individual shapes in a group" under Methods for working with groups table. Examiner is reading as modifying shape as a declaring an object as a main object in the diagram**)

(3) drawing a symbol corresponding to the main object (**Page # 18, Using connections table, Shape-to-shape, second shape**) and labeling the symbol with a label descriptive of the object's features so that it is distinguishable from other symbols of the same object type; (**Page # 21, Adding and changing text. Examiner is reading as describing a process for a shape represents as a description of the objects feature**)

(4) for each object assigned to or defined within the main object, drawing a symbol (**Page # 13, Step H**) corresponding to that object and labeling the symbol with a label descriptive of (**Page # 21, Adding and changing text. Examiner is reading as describing a process for a shape represents as a description of the objects feature**) the object's features; and

(5) drawing a line (**Page # 17**) between each object drawn in step (4) and another object in the graphical representation to which it is assigned or within which it is defined. (**Page # 17, Shape-to-shape connections**)

6. **As per claim 2**, the method of claim 1 further comprising the step of:

(6) providing a plurality of additional symbols (**Page # 13, Step H shows other types of symbol**) for use in the diagram, each of the additional symbols representing an object oriented programming element other than an object.

7. **As per claim 3**, the method of claim 1 further comprising the step of:

(7) graphically denoting the main object in the diagram by drawing another symbol around the symbol for the main object. **(Page # 18, Using connections table, Shape-to-shape, second shape)**

8. **As per claim 4**, the method of claim 3 wherein step (6) comprises drawing a circle completely enclosing the symbol **(Page # 18,16,24)** of the main object.

Examiner is reading, as described on page # 18 user can enclose a circle around on object and resize it as to which it can completely enclose around a object, as shown on page # 16. And as described on page #24 to modify the shape as to which it can enclose the symbol of the main object.

9. **As per claim 5**, the method of claim 1 wherein the labels comprise text. **(Page # 13, part H in figure shows that labels are in text)**

10. **As per claim 6**, the method of claim 1 wherein step (5) comprises drawing the line between the object defined in step (4) and another object it is most directly assigned to or is most directly defined within. **(Page # 17, Shape-to-shape connections)**

11. **As per claim 7**, the method of claim 1 wherein the method is used to document software. **(Page # 6 and 7)**

It is well known in the art that software documentation is done through software development and using Visio. Also, examiner is reading, "information flow, information services projects" as documenting software.

12. **As per claim 8**, the method of claim 1 wherein the method is used to prepare a program specification. **(Pages # 6 and 7)**

It is well known in the art that specification is also a part of the software development and Visio is capable of showing this.

13. **As per claim 20, Visio** describes the method of claim 1, wherein the method is implemented via a computer program, and wherein step (1) comprises providing a graphical user interface in which a user is presented with a pallet containing the symbols **(Page # 13)** and wherein steps (3).and (4) comprise dragging and dropping the symbols from the pallet into a work area **(Page # 12, second picture)**.

14. **As per claim 21,Visio** discloses the method of claim 1, wherein the method is implemented via a computer program, and wherein step (1) comprises providing a graphical user interface in which a user is presented with a pallet containing the symbols **(Page # 13)** and wherein steps (3) and (4) comprise dragging and dropping the symbols from the pallet into a work area **(Page # 12, second picture)**, and wherein the labels comprise text and further wherein at least some of the text labels **(Page # 13, part H in figure shows that labels are in text)** are hidden text **(Page # 21, To add a text to a shape)** that can be made to appear in the graphical representation via an action **(Selecting a shape)** taken by a user.

15. **As per claim 22, Visio discloses** a computer readable product embodied on computer readable media readable by a computing device for enabling a user to generate a graphical representation of object oriented programming logic, the product comprising:

first computer executable instructions that provide a graphical user interface in which a user is presented with a plurality of different symbols (**Page # 13**) for use in developing a graphical representation of object oriented programming logic (**Page # 7, lists various types of usage and specifically project management**), each different symbol representing a different type of object in object oriented programming (**Page # 31**);

second computer executable instructions that enable the user to drag and drop symbols into a workspace (**Page # 12 second step picture**) and label the symbol with a label descriptive of the object's features (**Page # 21**); and

third computer executable instructions that enable the user to draw lines between objects in the workspace (**Page # 17**).

16. **As per claim 23, Visio** discloses the computer readable product of claim 22 further comprising:

fourth computer executable instructions that enable the user to graphically denote the main object in the diagram by drawing another symbol (**Page # 18 Connections**) around the symbol for the main object.

It is common knowledge by drawing another symbol around any symbol represents a main object.

17. **As per claim 24, Visio** discloses the computer readable product of claim 22 further comprising:

fifth computer executable instructions that enable the user to denote one and only one object in the workspace as a main object (**Page # 24**). Examiner is reading

modifying a shape in a group as to denote one and only one object as main object in the workspace.

18. **As per claim 25, Visio** discloses the computer readable product of claim 24 wherein the fourth computer executable instructions comprise instructions **(Page # 18, Page # 16 and Page # 24)** enabling the user to enclose the one and only one object within a circle.

Examiner is reading, as described on page # 18 user can enclose a circle around on object and resize it as to which it can completely enclose around a object, as shown on page # 16. And as described on page #24 to modify the shape as to which it can only enclose only one object within a circle.

19. **As per claim 26,** see the same rejection as for the claim 5 above.

20. **As per claim 27, Visio** discloses the computer readable product of claim 22 further comprising:

sixth computer readable instructions that enable the user to prepare a plurality of the diagrams corresponding to separate parts of an overall application **(Page # 25)** and further comprising computer readable instructions for enabling the user to specify relationships between individual ones of the diagrams **(Page # 32-33)**.

Examiner is reading as adding plurality of pages for drawing as described on page 25 as user to prepare a plurality of the diagram corresponding to separate parts of an overall application. Also on pages 32-33 describes how to establish the relationship between individual diagrams.

21. **As per claim 28, Visio** discloses the computer readable product of claim 27 wherein the sixth computer readable instructions comprise instructions that enable the user to including references associated with symbols in one diagram identifying at least one other diagram within which the object represented by that symbol also appears.

(Page # 32, Working with large flowcharts)

Examiner is reading shape numbering and off-page reference shapes as references associated with symbols in one diagram identifying at least one other diagram within which the object represented by that symbol.

22. **As per claim 29, Visio** discloses the computer readable product of claim 28 wherein the sixth computer readable instructions comprise instructions that enable the user to specify in a first one of the diagrams the nature of the relationship of the representation of the object in the first diagram relative to the representation of the object in a second diagram, **(Page # 32, adding information to your flowchart)** wherein the relationship between the object as represented in the first and second diagrams is selected from the group comprising: (1) the second diagram discloses additional details about the object in the first diagram; (2) the second diagram shows the object in a more abstract context than the first diagram; and (3) the object is the main object of the second diagram. **(Page # 32, working with large flowcharts)**

Examiner is reading adding information to your flowchart described on page 32, custom properties, which user can specify in a first one of the diagrams the nature of the relationship of the representation of the object in the first diagram relative to the representation of the object in a second diagram. On page 32, under working with large

Art Unit: 2109

flowcharts, describes a use of cross-reference explanatory notes, in which user can disclose additional details about the objects.

23. **As per claim 35**, see the same rejection for the claim 21 above.

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims **9-10, 13-15, 18-19, 30-32 and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over in **Visio 2000 Standard Edition User Guide** view of **Hill et al. (Hill) US PG-PUB 2003/0120678**.

26. **As per claim 9**, Visio describes the method of claim 1 further comprising the step of:

(8) repeating steps (1) - (5) to prepare a plurality of separate diagrams corresponding to separate parts (**Page # 13, step G, it is inherent that to draw a separate diagram user needs separate pages**) of an overall application however fails to disclose **“wherein a first object is the main object appearing in at least a first one of the diagrams and is not a main object appearing in at least a second one of the diagrams.”**

Hill describes a method, which shows a first object (**Fig. # 2**) is the main object appearing in at least one of the diagrams and is not a main object appearing in at least a second one of the diagrams (**Fig. # 3, box # 72**).

Hill is evidence that ordinary workers in the art would use Hill's object representation scheme to describe the main object in the first diagram from second diagram for better understanding of the logic of the first diagram (Para. # 0031).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the method of Hill using Visio. Doing so would improve the understanding (**Page # 30, 1st paragraph**) of a main object in first diagram.

27. **As per claim 10, Visio does not disclose “the method of claim 9 wherein the second diagram does not disclose objects assigned to and defined within the first object and the first diagram does disclose objects assigned to and defined within the first object.**

Hill discloses a second diagram as shown in figure 3, configuration object, which does not disclose objects assigned and defined within the first diagram as shown in figure 7, which does disclose objects assigned and defined within the first object.

Therefore, it would have been obvious one of ordinary skill in the art at the time of the invention was made to use Hill's method with software product of Visio. Doing so would clarify the logic behind the first diagram. **(Page# 30, 1st paragraph)**

28. **As per claim 13, Visio** does not explicitly describes the method of claim 1 wherein the symbols representing different object types include:

“a first symbol for representing objects that are application type objects; a second symbol for representing objects that are window type objects; a third symbol for representing objects that are class type objects; a fourth symbol for representing objects that are event script type objects; and a fifth symbol for representing objects that are method type objects.”

However, Hill describes a first symbol for representing objects that are application **(Fig. # 3, corresponding text in Para. # 0045, lines 9-10)** type objects; a second symbol for representing objects that are window **(Fig.# 4, Box# 198)** type objects; a third symbol for representing objects that are class **(Fig.# 5, Box# 220)** type objects; a fourth symbol for representing objects that are event script **(Fig. # 3, box# 106)** type objects; and a fifth symbol for representing objects that are method **(Fig. # 3, corresponding text in Para. 0045, lines 9-10)** type objects. Examiner is reading logic for building themselves as a method type objects.

Hill is evidence that ordinary workers in the art would find a reason, suggestion and motivation to symbols and label symbol for better understanding of the software system.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to add symbol representation of Hill using Visio. Doing so would improve the understanding of software development process and how it can be improved.

29. **As per claim 14, see the same rejection as in claim 13 for the first five symbols. Visio does not explicitly describe “and wherein the symbols representing additional program elements include: a sixth symbol for representing data transfer; a seventh symbol for representing databases; an eighth symbol for representing remote links; and a ninth symbol for representing inheritance.”**

Hill discloses a sixth symbol for representing data transfer (Fig # 3, box # 132); a seventh symbol for representing databases (Fig.# 3, box # 102); an eighth symbol for representing remote links (Fig. # 3, lines showing between box # 150 and box # 102); and a ninth symbol for representing inheritance (Fig. # 4, lines showing between box # 190 and box # 192, corresponding text in paragraph 0053, lines 1-2).

Hill is evidence that ordinary workers in the art would find a reason, suggestion or motivation to use these objects to convey the logic of a system effectively and how it can be improved.

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention was made to add these symbols and label them as Hill in Visio would improve an understanding of the logic behind a system for better implementation of a system.

30. As per claim 15, Visio does not explicitly describe the method of claim 14 wherein the sixth, eighth and ninth symbols are drawn connecting two other object symbols.

Hill discloses the sixth (Fig # 3, box # 132), eighth (Fig. # 3, lines showing between box # 150 and box # 102) and ninth (Fig. # 4, lines showing between box # 190 and box # 192, corresponding text in paragraph 0053, lines 1-2) symbols are drawn connecting two other object symbols.

Hill is evidence that ordinary workers in the art would find a reason, suggestion or motivation to use this object connection scheme to describe the dependencies of these objects to each other.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to use the scheme of Hill in Visio. Doing so would improve an understanding and behavior of the objects for software system.

31. As per claim 18, Visio does not explicitly describe the method of claim 13 wherein the fourth symbol representing event script (Fig.# 3, 106) type objects is drawn connected to another object (Fig.# 3, 72) that directly executes the event script corresponding to the event script symbol.

Hill describes the fourth symbol representing event script (Fig.# 3, 106) type objects is drawn connected to another object (Fig.# 3, 72) that directly executes the event script corresponding to the event script symbol. In figure 3, script object is attached to "component" object. Therefore, examiner is reading as event script object is

Art Unit: 2109

connected to another object that directly executes the event script corresponding to the event script symbol.

Hill is evidence that ordinary workers would find a reason, suggestion or motivation to use these objects arrangement scheme to clarify the logic associated with symbol.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to use the scheme of Hill in Visio. Doing so would improve an understanding of logic behind a symbol of an object associated with another symbol.

32. As per claim 19, Visio does not explicitly describe the method of claim 13 wherein the fifth symbol representing method type objects is drawn connected to the main object of the diagram and represents that the object is available within that main object and does not represent that the main object invokes it.

Hill describes the fifth symbol representing method type objects is drawn connected to the main object of the diagram and represents that the object is available within that main object and does not represent that the main object invokes it (Fig.# 3, box # 102, 72, 106). In figure 3, the examiner is reading component objects are method objects (**Para. # 0045, lines 9-10**) and they are drawn within the main object component database of the diagram and it shows that it is available within the main object and does not represent that the main object invokes it.

Hill is evidence that ordinary worker would find a reason, suggestion or motivation to use these object representation for better description of the logic behind an object.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to use object representation of Hill in Visio. Doing so would improve an understanding of logic behind main object of the diagram.

33. **As per claim 30**, see the same rejection for the claim 13 above.

34. **As per claim 31**, see the same rejection for the claim 14 above.

35. **As per claim 32**, see the same rejection for the claim 15 above.

36. **As per claim 34**, see the same rejection for the claim 17 above.

37. Claims 11-12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over in **Visio 2000 Standard Edition User Guide**.

38. **As per claim 11**, Visio discloses the method of claim 10 wherein the second diagram (**Page # 31, Working with large flowcharts**) is an application-level (**Page # 31, Fig. "Making Apple Juice"**) representation disclosing an overall software system.

Examiner is reading as by using cross-reference explanatory notes for the shapes and using off-page reference to the shape user can describe the second diagram is an application level representation of an overall software system (**as shown on page 31, which is a example of a software system**)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use Visio to describe an overall software system. Doing so would improve the understanding and communicate how a overall system works and how it can be improved. **(Page # 30 1st paragraph)**

39. **As per claim 12, Visio** discloses the method of claim 10 wherein the label for the first object in the second diagram identifies the first diagram as disclosing further details of the first object. **(Page # 32-33, “Working with large flowchart” and “To connect to a new or existing page in your flowchart using the Off-page Reference shapes”)**

Examiner is reading, using Off-page cross reference shape **(Page # 32)** identifies the first object and the second diagram by inserting and describing it to in the cross reference explanatory notes **(Page # 32)** that the first diagram is disclosing further details of the first diagram.

Therefore it would have been obvious for one of ordinary skill in the art to use Visio to describe the programming logic in the software development process. Doing so would improve the explanation for the developing system. **(Page # 30, 1st paragraph)**

40. **As per claim 17, Visio** discloses the method of claim 13 further comprising the step of:

(9) providing in a separate document a description of the logic **(Page # 32, Working with large flowcharts, first bullet)** to be performed responsive to an event script.

It is obvious that description of the logic is described in the cross-reference explanatory notes. Examiner is reading as creating a cross-reference explanatory notes as a creating a separate document which has a description of a process (**Page # 32, Working with large flowcharts, first bullet**).

41. Claims 16 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Visio 2000 Standard Edition User Guide** in view of **Hill et al. (Hill) US PG-PUB 2003/0120678** and in further view of **Bowman-Amuah et al. (Bowman-Amuah) USPAT 6,550,057**.

42. As per claim 16, **Visio** does not explicitly describe the method of claim 14 wherein the symbols representing different object types further include; a tenth symbol for representing objects that are menu type objects; a eleventh symbol for representing objects that are frame type objects; an twelfth symbol for representing objects that are button type objects; a thirteenth symbol for representing objects that are data structure type objects; and a fourteenth symbol for representing objects that are not one of the other object types.

Hill has teaches a thirteenth symbol for representing objects that are data structure type objects (**Fig.# 2, Para. # 0031, lines 1-3**), and fourteenth symbol for representing objects that are not one of the other object types (**Fig. # 3, box # 70**), but fails to disclose: “...**a tenth symbol for representing objects that are menu type objects; a eleventh symbol for representing objects that are frame type objects; an twelfth symbol for representing objects that are button type objects**”

Bowman-Amuah discloses menu type objects (**Figure 14, 1002/1004**), frame type objects (**Figure 14, box # 1404,1408,1410,1412,1414**), and button type objects (**Fig. # 36, Pricing, Product, Customer, Order**).

Bowman-Amuah is evidence that ordinary workers in the art would find a reason, suggestion and motivation to add the symbols for menu, frame and button type objects for better representation of the software development process.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Hill by adding menu, frame and button type objects (**Fig. # 14, 1002,1004, box # 1404,1408, 1410, 1412, 1414 as disclosed by Bowman-Amuah**) using Visio. Doing so would improve the software development process by having a better visual representation of the programming logic.

43. **As per claim 33, see the same rejection for the claim 16 above.**

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Loren Chauhan whose telephone number is 571-270-1554. The examiner can normally be reached on Mon.-Fri. 7:30-5:00 (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Megnistu can be reached on 571-270-1550. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


AMARE MENGISTU
SUPERVISORY PATENT EXAMINER